



GOFC and the CEOS WGISS Test Facility (WTF)

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Goals for this Presentation

- **Quick background & history of CEOS**
- **Potential CEOS contributions to GOFC**
 - **Networks**
 - **Data**
 - **Access tools**
- **Invitation to participate in the CEOS-GOFC testbed (“WGISS Test Facility”)**

Some History

□ **CEOS = Committee on Earth Observations Satellites**

- Includes members representing the space agencies from around the world (NASA, NASDA, CSA, Eumetsat, ESA, INPE, DLR, ISRO, ...)
- Also include associates from various government agencies and NGOs (FAO, GOOS, GTOS, GCOS, ICSU, IGBP, UNEP, WCRP, WMO, ...)

□ **WGISS = CEOS Working Group on Information Systems and Services**

- WGISS has 3 subgroups: Networks, Access and Data
- Each has tasks to investigate and implement technologies relevant to Earth observation data & data management

What can WGISS do for GOFC?

□ Networks

- Network peering, network transit
- Performance monitoring

□ Data & Access

- CEOS agencies manage archives of satellite data
- CEOS agencies collaborate on data access protocols, tools, services

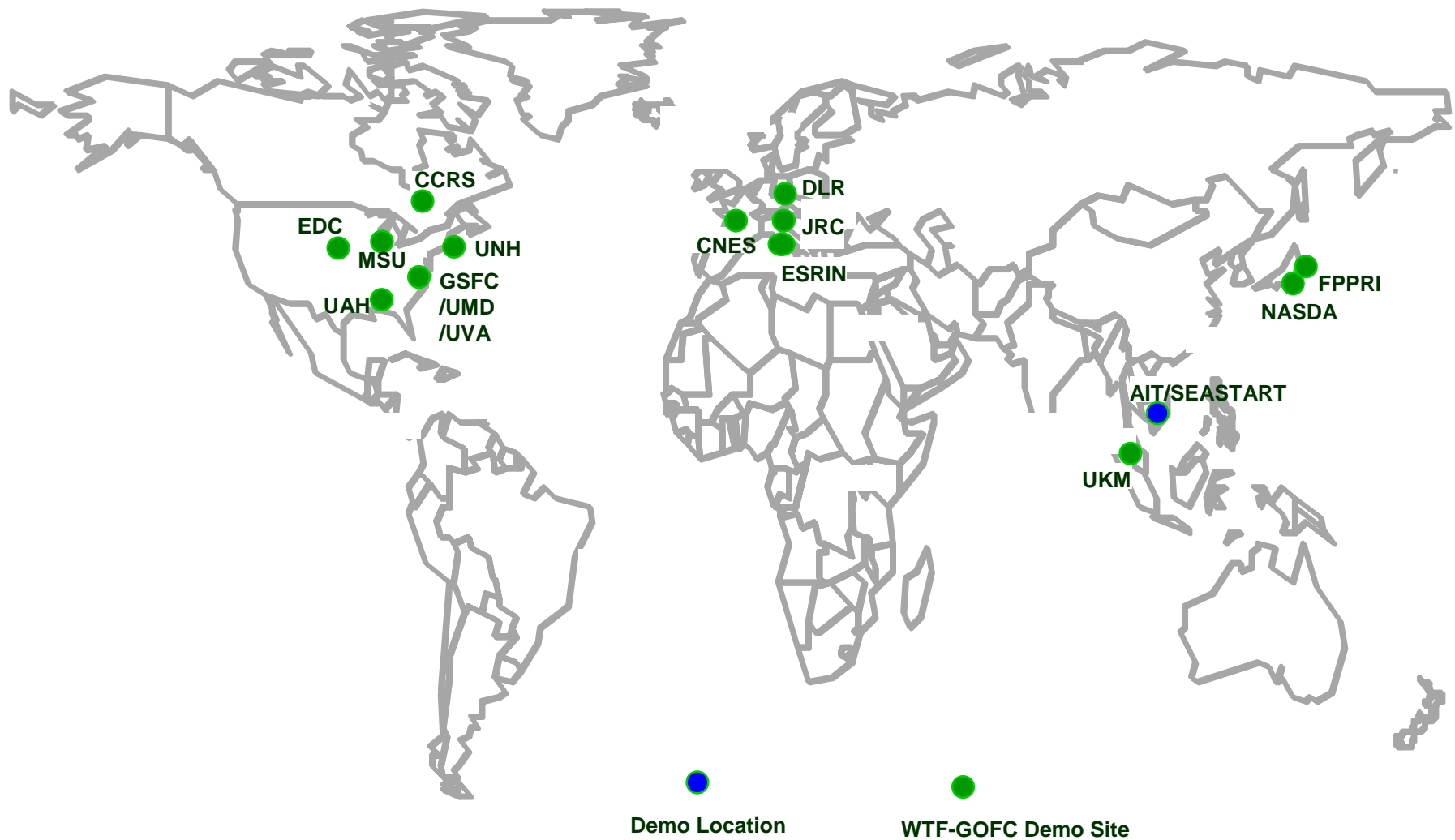
□ “WGISS Test Facility”

- A new concept within CEOS: the WTF is a collaborative testbed among CEOS agencies
- WTF-GOFC is a “nakodo” of CEOS technologies (networks, data, access) and GOFC science objectives (fire, land cover)
- First iteration of WTF-GOFC held in Bangkok last week

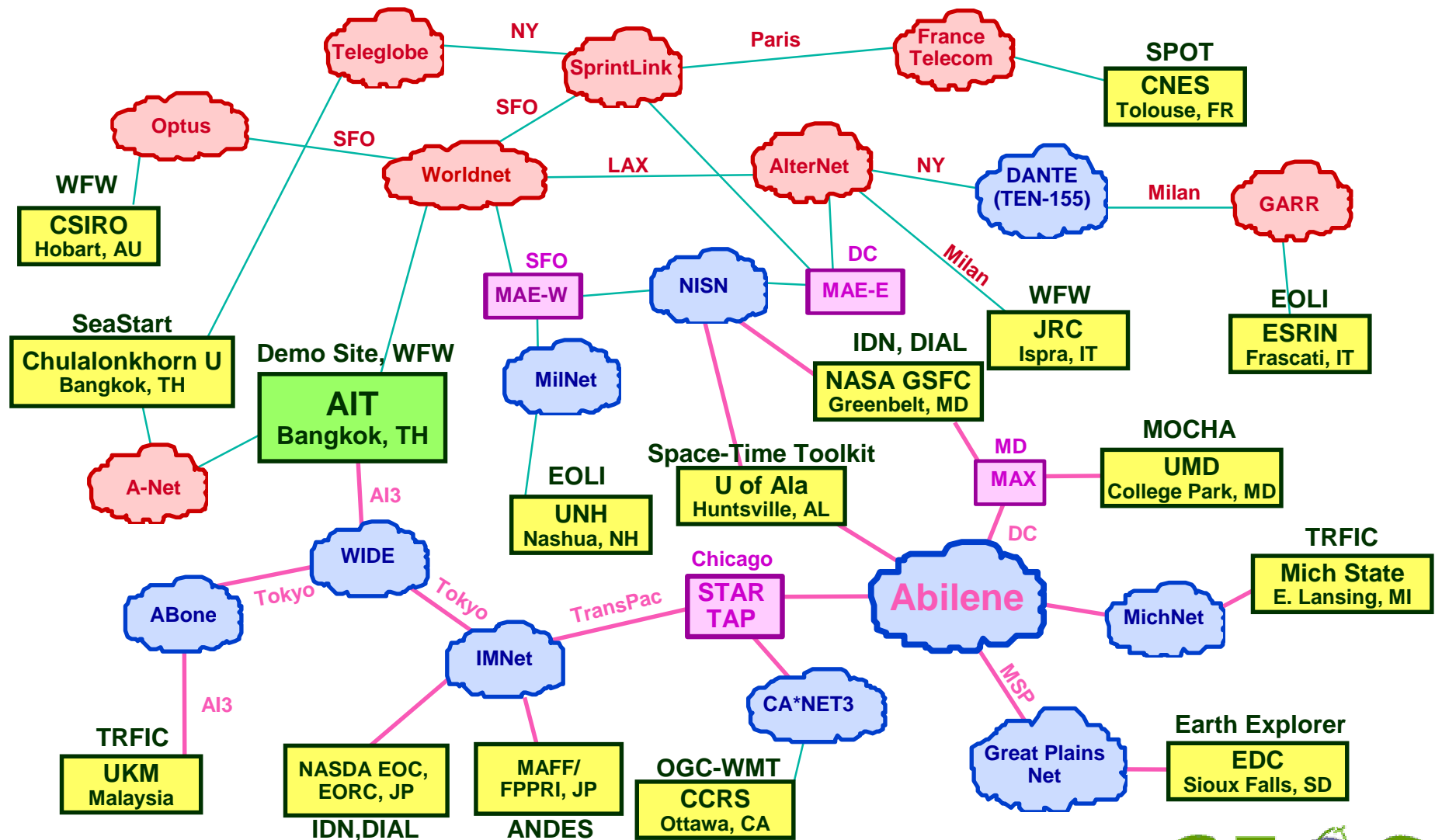
WTF-GOFC September 2000

- **WGISS Subgroups meeting hosted by NASDA and the National Research Council of Thailand (NRCT)**
- **Here is a list of the WTF-GOFC demos:**
 - **World Fire Web (European Commission Joint Research Center)**
 - **Earth Explorer (USGS EDC)**
 - **Data Warehouse/CEONet (CCRS/USGS EDC)**
 - **Tropical Rainforest Information System (Michigan State University, University of Kuala Lumpur, Malaysia)**
 - **EOLI/MUIS (ESA ESRIN)**
 - **Space-Time-Toolkit (University of Alabama Huntsville)**
 - **MOCHA (University of Maryland)**
 - **MODIS Fire (University of Virginia)**
 - **DIAL OGC/WMT Demo (Raytheon ITSS, NASDA, Saga University, SEA START RC, NASA/GSFC, ACORS/AIT/Bangkok)**
 - **GOFC International Directory Network Portal (NASA/GSFC)**
 - **SPOT VEGETATION Data Access (SPOT Image, CNES)**

Bangkok WTF-GOFC Demo Sites



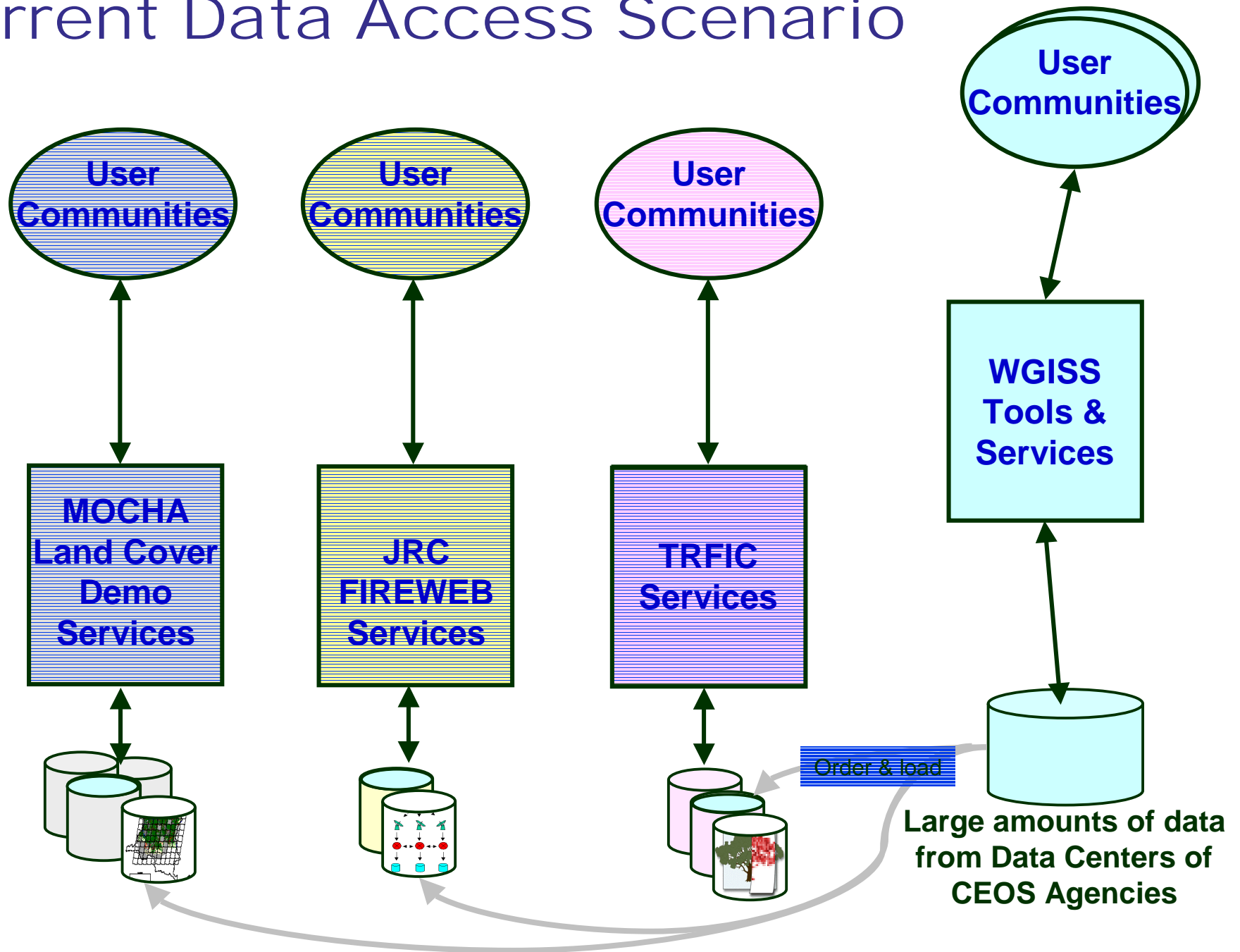
Bangkok WTF-GOFC Demos Sept. 2000 Network Configuration



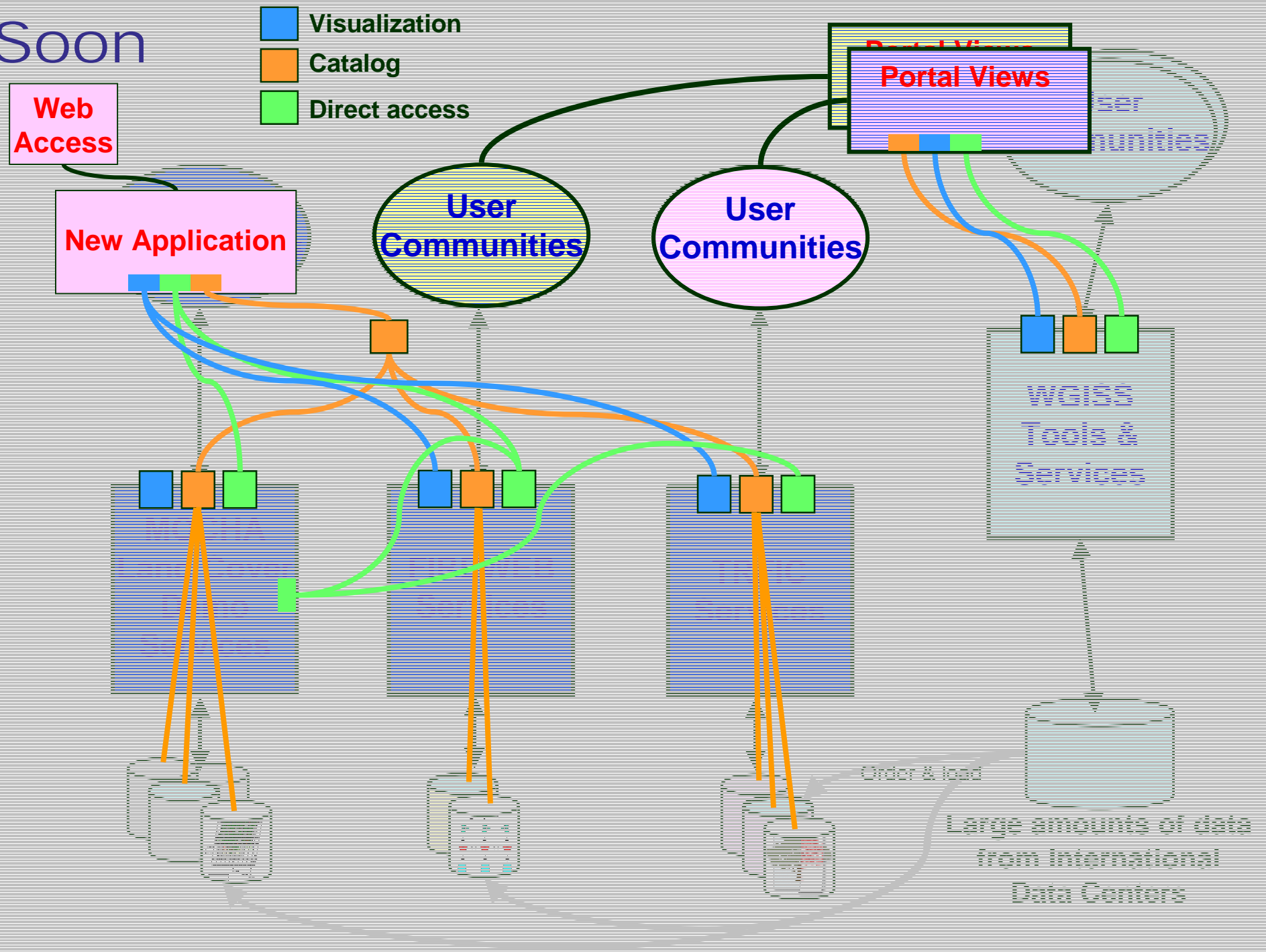
Data & Access/GOFC Goals

- **Data availability - acquisition and operations**
- **Ease of getting and using data**
 - **Discovery, access to multiple sources, data quality, using multiple formats**
- **Linking Earth observation data to users' data and in-situ data**

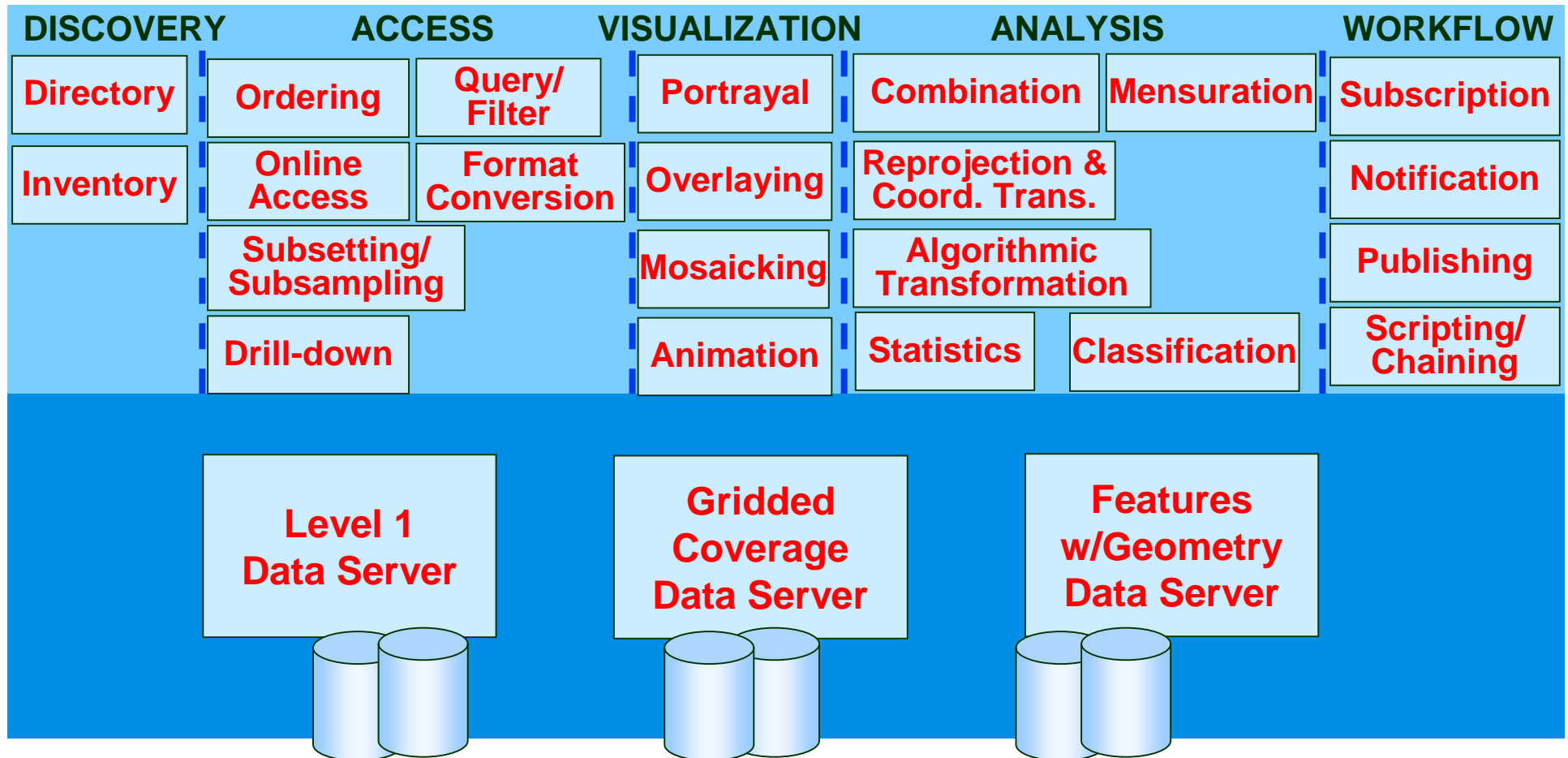
Current Data Access Scenario



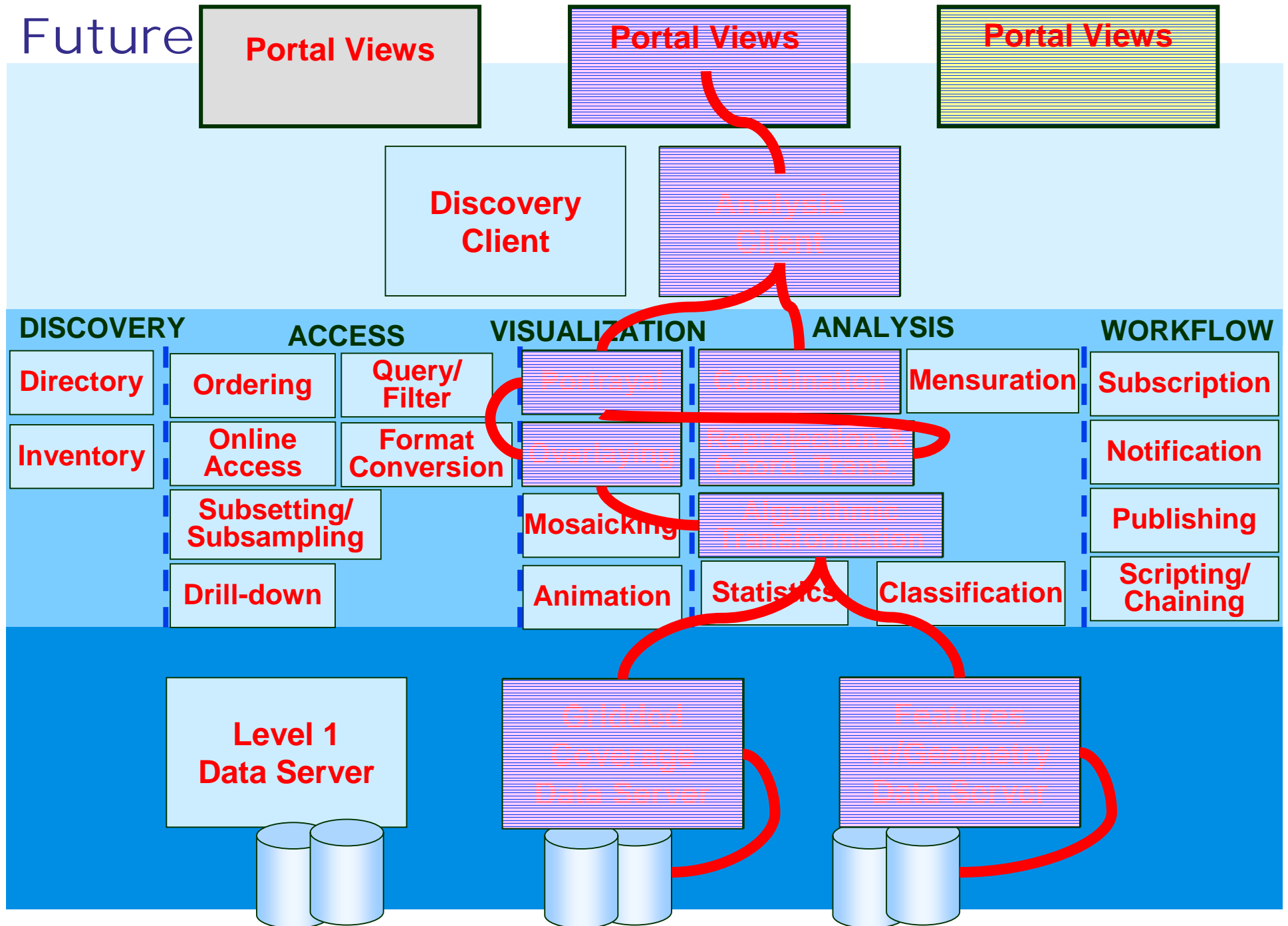
Soon



Candidate Core Data Services



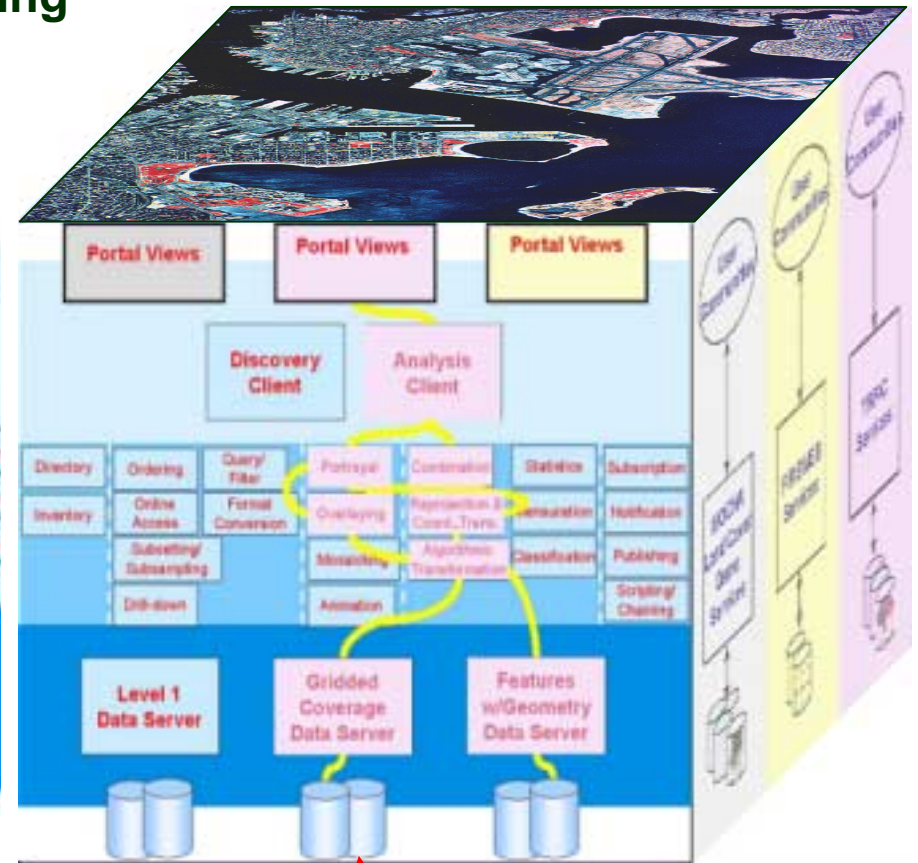
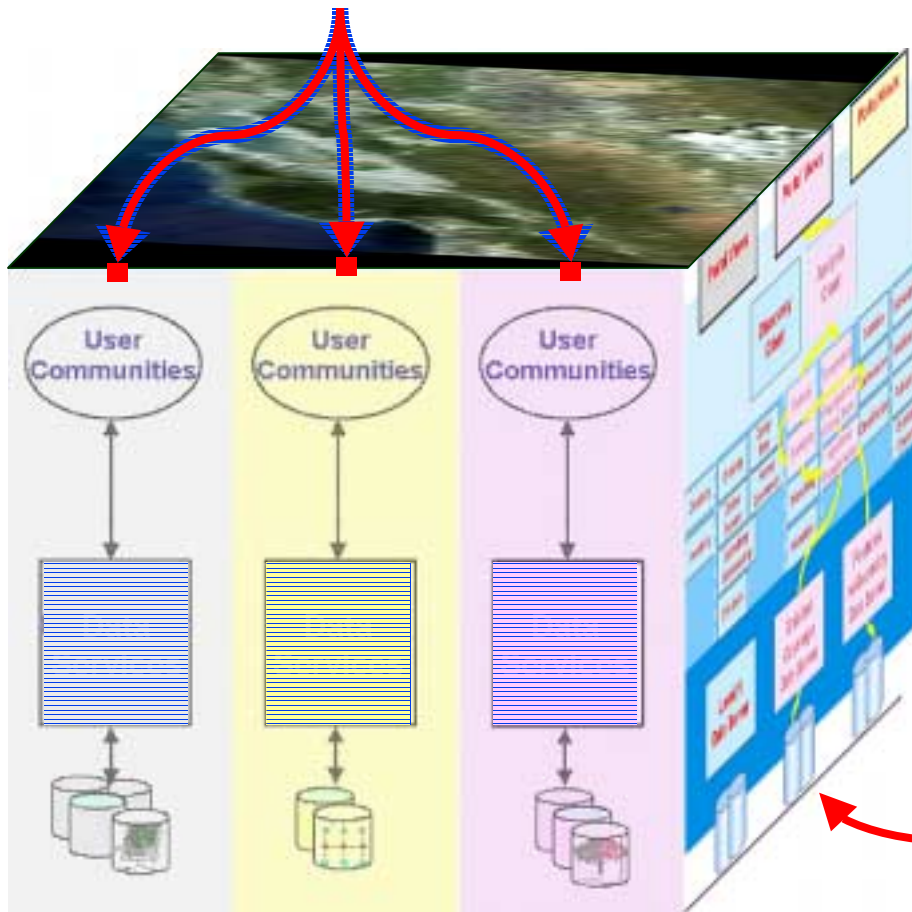
Future



Future - another look

Using the WGISS Products and Services, new applications can be built while preserving a project or community feel.

Science Community Views



WGISS
Products & Services



WTF-GOFC Evolution

□ Three to five year activity

- Testbed is expected to provide feedback to GOFC users, GOFC design & implementation teams, and to GOFC technologists for the evolutionary development of GOFC products and information systems

□ Initial focus on:

- development of target vision/architecture for WTF
- pilot project to support GOFC fire and Land Cover

Way Forward

- **This September: “Bootstrap” WTF with initial focus on GOFC requirements**
 - develop GOFC scenarios and demos
 - scenarios leverage “marriage” of existing WGISS capabilities with existing GOFC capabilities/requirements
- **Technical Team meeting this November in Washington, DC area**
 - Refine understanding of GOFC fire and land cover scenarios and needs for information systems & services
 - Identify elements among WTF-GOFC existing data systems and services that promote openness and modularity
 - Set targets for development and demonstration of tools and services that promote GOFC science goals
 - Talk to Matt Schwaller, Chris Justice or Dave Skole if you are interested in participating
 - Additional T.T. telecons/meetings and WTF-GOFC demos are planned for 2001